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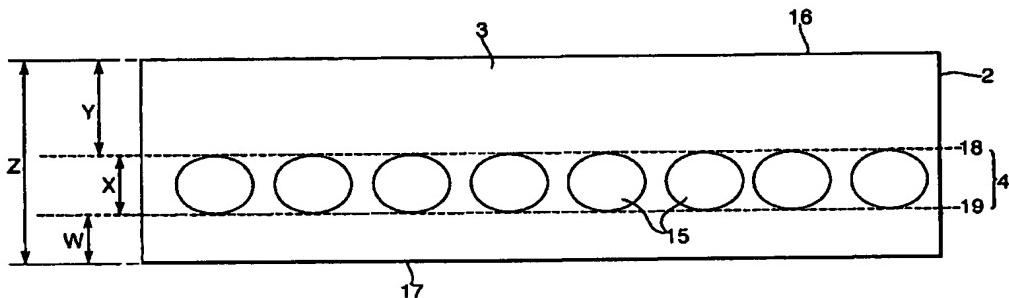
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(54) Title: APPARATUS AND METHOD FOR PLASMA PROCESSING



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(57) **Abstract:** Plasma processing apparatus is provided having a chamber (1), first (3) and second (8) electrodes, and power supply (10) to generate the plasma. The first electrode (3) is formed from a nickel alloy having substantially planar upper (16) and lower (17) surfaces. A heater (4) heats at least the first electrode (3) to a processing temperature. The heater (4) comprises one or more heating members (15) arranged in a substantially planar manner, the heater (4) and first electrode (3) forming an assembly such that the parts of the one or more heating members (15) that are closest to an upper surface (16) of the first electrode (3), define a first plane (18) that is separated from the upper surface (16) by a distance Y, the parts of the one or more heating members (15) that are furthest from the upper surface (16) of the first electrode (3), define a second plane (19), where in the separation of the first (18) and second (19) planes defines a heater thickness X and wherein Y lies in the range 1.2X to 3X.